

Amendments to the Specification:

Please replace paragraph starting with line 18 on page 8 with the following paragraph:

The substrates will typically be composed to glass or plastics. The seal between the substrate and the chip is composed of a plastic material such as silicone. Typical cross-sectional dimensions of the substrates will be 10-micron to 2-millimeters cross-sectional diameter or each side in case of non-circular substrates between one micrometer and ten centimeters, preferably between ten micrometer and ten millimeters. The length of the substrates is between 100 microns and ten centimeter, preferably between one millimeter and ten centimeter. Substrates will usually contain deposition of molecules such as oligonucleotides, proteins, antibodies or aptamers, which have specific affinity to molecules of interest. Alternatively, the surface of the substrates can contain modifications to allow them to capture classes of material from samples. Once substrates are removed from the microfluidic chips, they can also be interfaced with other non-microfluidic analytical instruments. For example, a substrate containing depositions of antibodies can be exposed to a sample containing proteins and allowed to capture specific proteins. Subsequently, the substrate can be interfaced with a MALDI-ToF instrument that allows identification of the proteins captured on the substrate.